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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,263	11/17/2003	Masahiro Kimura	0943-0142P	1737

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BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER

NATARAJAN, VIVEK

ART UNIT PAPER NUMBER

3735

DATE MAILED: 12/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/713,263	KIMURA, MASAHIRO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Vivek Natarajan	3735	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/28/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 9-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/17/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I, claims 1-8 in the reply filed on 11/28/05 is acknowledged. The traversal is on the ground(s) that a different field of search is not required for Groups I and II. This is not found persuasive because the invention disclosed in Claims 1-8 falls under a separate subclass from the invention disclosed in Claims 9-21.
2. The requirement is still deemed proper and is therefore made FINAL.
3. Claims 9-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 11/28/05.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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2. Claims 1-2, 6 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Boas (US Patent No. 6,577,884).
3. Regarding Claim 1, Boas discloses an apparatus for irradiating near infrared light to the brain for blood volume measurements to detect adverse ischemic events. The apparatus (see Fig. 16a and the description thereof in col. 11, lines 15-44) includes a cover member 410 with a measuring unit comprising a light irradiation section 432 and light reception section 434, wherein both sections are positioned out of direct contact with the brain (i.e. on the surface of the scalp).
4. Regarding Claim 2, Boas indicates that the cover member may be a helmet.
5. Regarding Claim 6, the apparatus detects light reflected by the brain.
6. Regarding Claim 8, the apparatus is used to detect ischemic stroke events, wherein the volume of bleeding in the brain is measured and calculated.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3-5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boas as applied to Claim 1 above, and further in view of Lemelson (US Patent No. 5,995,866). Boas discloses an apparatus for irradiating near infrared light to the brain for blood volume measurements to detect adverse ischemic events. The apparatus

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includes a cover member 410 with a measuring unit comprising a light irradiation section 432 and light reception section 434, wherein both sections are positioned out of direct contact with the brain. Boas further indicates that the light irradiation section may not be optodes but simply lasers positioned adjacent to the measurement site (col. 14, lines 8-20). Boas does not disclose that these laser irradiation sources embedded in the cover member include a condenser lens and scanning mechanism to allow a desired portion of the object to be scanned. Lemelson discloses an apparatus (see Figs. 5 and 6 and the description thereof in col. 8, lines 9-61) for analyzing matter by sensing radiation reflected from said matter. The apparatus comprises a scanning mechanism 70 to manipulate the light sources themselves to scan a desired portion of the object to be measured. The manipulator arms are capable of moving the laser in both angular and axial directions with respect to the object being measured. Lemelson also teaches that the light source may include a lens that is controllably pivoted about an axis to change the irradiation direction of the light (col. 5, lines 28-47) and further teaches that piezoelectric devices may be used to deflect the light beam (col. 6, lines 30-48). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the optical apparatus disclosed by Boas by including a scanning mechanism, lens, and piezoelectric elements as taught by Lemelson since this allows the light irradiation section of the apparatus to controllably scan a desired portion of the object to be measured.

**Conclusion**


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Doern et al. (Pub No. US 2004/0064149 A1) discloses a fiber optic probe holder that allows the probe to be held in a fixed position out of contact with the tissue portion being examined.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivek Natarajan whose telephone number is (571)272-6249. The examiner can normally be reached on Mon-Fri, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ali Imam can be reached on (571)272-4737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VN

  
ERIC F. WINAKUR  
PRIMARY EXAMINER